

12 Watt Wide Input Range DC-DC Converters/ ^{DCW} Dual Output

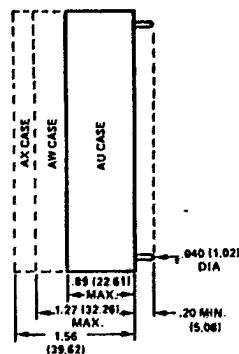
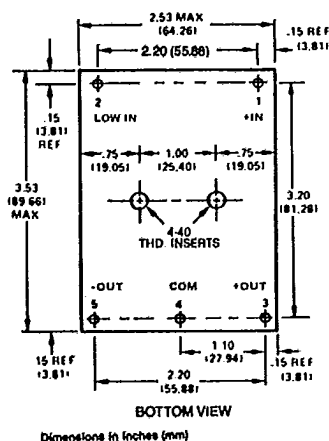


INPUT: 5, 12, 24, 48 VDC
OUTPUT: ± 12 , ± 15 VDC

- Wide 2:1 Input Range (on 400 & 500 mA models)
- No Heat Sink Required
- Low Output Ripple
- High Input/Output Isolation
- Short Circuit Protection

The DCW series converters have been designed to provide fully-regulated dual outputs up to 12 watts maximum.

A high-efficiency pulse width modulation switching scheme maintains efficiency while providing the noise and regulation advantages of linear outputs. A high attenuation filter is incorporated which reduces kickback spikes and reflected ripple from inverter switching.



Specifications Typical at +25°C. After 15 minute warm-up unless otherwise noted.

Model DCW	12/12D/500	12/15D/400	24/12D/500	24/15D/400	48/12D/500	48/15D/400
Input Voltage	9-18VDC	9-18VDC	18-36VDC	18-36VDC	36-72VDC	36-72VDC
Input Current (Nom. Line)	200mA	200mA	100mA	100mA	50mA	50mA
No Load	1.67A	1.67A	830mA	830mA	420mA	420mA
Full Load						
Input Capacitance	47 μ f	47 μ f	15 μ f	15 μ f	6.8 μ f	6.8 μ f
Input/Output Isolation Impedance	10 ¹¹ Q 120pF	10 ¹¹ Q 120pF	10 ¹¹ Q 120pF	10 ¹¹ Q 120pF	10 ¹¹ Q 120pF	10 ¹¹ Q 120pF
Voltage	300VDC	300VDC	300VDC	300VDC	300VDC	300VDC
Output Voltage	± 12 VDC $\pm 1\%$	± 15 VDC $\pm 1\%$	± 12 VDC $\pm 1\%$	± 15 VDC $\pm 1\%$	± 12 VDC $\pm 1\%$	± 15 VDC $\pm 1\%$
Output Current Nominal	± 500 mA	± 400 mA	± 500 mA	± 400 mA	± 500 mA	± 400 mA
Output Ripple	7mV rms					
Reflected Input ¹ Ripple Current Max. (FL)	150mA p-p					
Regulation Line (Low Line-Hi Line) Load (No Load-Full Load) vs. Temperature	0.1% max. 0.1% max. 0.05%/°C					
Switching Frequency	40KHz					
Efficiency (L.L. to H.L.)	60%					
Input Protection	Shunt Diode					
Short Circuit Protection	Indefinite					
Temperature Range Operating, No Load	-25°C to +85°C					
Operating, 100% Load	-25°C to +71°C					
Storage	-25°C to +85°C					
Case Temperature Rise @ 100% Load	+25°C					
Case Material	Phenolic					
Mating Socket	S126					
Case Size	AU					
Case Weight	14 oz.					

Note:

1. The measured value of Input reflected ripple current is independent of the impedance of the power source. The specification above is shown in mA so that the user may calculate ripple voltage unique to the application.



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